Injuries are pervasive in any athletic* discipline. They can range from minor annoyances that resolve within a few days to career-ending joint damage. While we often think about obvious, specific event-related injuries such as torn ligaments or broken bones, there are many more silent, subtle injuries that can be just as serious.

Any professional athlete is being constantly monitored by training staff for potential injury, and most spend extensive time with athletic trainers and/or physical therapists to offset strain injuries and recover from past damage. They also have easy access to team physicians. However, your average amateur athlete (and often professional performing artist) does not have access to this kind of care. To complicate this situation, it is often financially difficult and extremely time-consuming – not practical – to visit a doctor for every ache or pain that pops up in athletic activity.

Tracking injuries is a common practice in sports medicine. It is widely recognized that injury tracking is important for recognizing overuse injuries, as well as identifying elusive joint issues. There are several commercial programs available for injury tracking such as that seen in figure 2; however, these are targeted towards use by athletic trainers and sports medicine professionals (2). I have been unable to find any device or software targeted towards individual amateur athletic users. Individual amateur athletes are often already invested in their health, and may employ non-ideal methods to track their own injuries. It would be ideal to support and encourage these behaviors within a more effective application environment.

*Note that I am using the word “athletic” here very generally. A better description would be “involving the repeated use of the body to accomplish some physically demanding task.” This would include groups such as running, skiing, cycling, and dancing.
dancers, circus or other acrobatic performance artists, etc. It could potentially be expanded beyond this realm as well, but the focus will remain on these groups to scope the problem.

THE PROBLEM

For amateur athletes, it can be difficult to decide whether or not to see a healthcare provider for what could be a minor injury that will heal on its own in time. Because athletes are nearly always experiencing some sort of discomfort, identifying concerning patterns that could trigger a visit to a doctor can be difficult. Injury tracking is known to be an important method for determining the appropriate treatment of injuries, but there is a lack of injury tracking applications/practices targeted towards individual amateur users.

There are many interesting issues here – the self-tracking environment for an athletic context is different from most others (many athletes won’t have their phones by them during work-outs or training, but might still be wearing something like a smart watch). There’s also many potential modes of interaction for a solution, and an incredibly large potential user group.

CITATIONS

